

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022552**Date Inspected:** 06-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China**CWI Name:** Mr. ZHU ZHONG HAI**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Complete Joint Penetration (CJP) welds joining the side plate to side plate transverse splice weld joint located on 11CW+11DW at counter weight side. The weld is designated as OBW11C-002. The welder is identified as 046709. ZPMC QC Mr. ZHU ZHONG HAI was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-P-2214-B-U2-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Fillet welds joining the I-Rib to deck plate hold back weld joint located on 11CW+11DW at cross beam side. The weld is designated as DP693-001-015(11CW) & DP694-001-009(11DW). The welder is identified as 041713. ZPMC QC Mr. ZHU

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YUAN YUAN was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-T-4114-1.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Fillet welds joining the T-Rib to side plate hold back weld joint located on 11DW+11EW at counter weight side. The weld is designated as SP116-001-029(11DW) & SP117-001-001(11EW). The welder is identified as 049220. ZPMC QC Mr. ZHU YUAN YUAN was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2132.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Built-up weld for the I-Rib located on west side of the 11AW at counter weight side. The I-rib is designated as RS62A & RS66A. The welder is identified as 040667. ZPMC QC Mr. ZHU ZHONG HAI was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-3G (3F)-FCM-Repair-1. The weld repair report number is named as WR-16348.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the side plate to side plate transverse splice weld joint located on 11AE+11BE at bike path side. The weld is designated as OBE11B-004. The welder is identified as 040320. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-2161.

ZPMC personnel performing oxy acetylene cutting of shop weld for the bottom plate to side plate hold back weld joint located on east side of 11DW at counter weight side due to the misalignment. ZPMC QC Mr. ZHOU PENG was onsite monitoring the variables. The weld repair report number is named as CWR-2139. See attached picture for detail.

2. NDT:

Ultrasonic Testing (UT) (A, B, C and D-Scan):

UT carried out as per the ABF submitted UT Report UT-11W-045 R1.

This QA Inspector performed Ultrasonic testing (UT) 10 % of the area that has been previously tested and accepted by ABF Quality control personnel. This QA inspector generated a UT (TL-6027) report on this date. The members are identified as portion butt joint between side plate to side plate transverse splice weld joint located on 11BW+11CW at counter weight side. According to rejection criteria of “D” Scan procedure that Caltrans QA did not find any Rejected indication at scanning area. The Weld Designation is as follows: OBW11B-006 & 007.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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| Inspected By: | Pillai,Santosh | Quality Assurance Inspector |
| Reviewed By: | Miller,Mark | QA Reviewer |
